

ABSTRACT OF THE DISCLOSURE

Pub.
A¹¹ 5

A semiconductor device having a PHS layer on the back surface thereof, preventing from a short circuit between a bonding wire and a first metal layer. Forming catalyst layer on a bottom of a first separation groove formed in the front surface of a semiconductor substrate, forming the first metal layer selectively in the first separation groove by an electroless plating technique using the catalyst layer as a catalyst.